Amendments to the Claims

This listing of the claims will replace all prior versions and listings of claims in the present application.

Listing of Claims

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) ~~The~~ A method ~~of claim 4~~ for compressing data for transmission using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, the method comprising the steps of:

representing the first end of a segment of the plurality of segments with a partition compression code word, the segment being at least one of an ATM cell, an ATM PDU, and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU, or the IP packet; and

compressing a remaining portion of the segment,

wherein the partition compression code word represents a partition command sequence, and

wherein the representing step further includes the step of:

providing a compound compression code word to represent the partition command sequence and another portion of the segment, the partition command sequence representing the first end of the segment.

6.   (Cancelled)

7.   (Cancelled)

8.   (Previously Presented)   A method for compressing data for transmission using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, a dictionary being used in compressing the data, the method comprising the steps of:
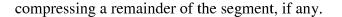
representing the first end of a segment of the plurality of segments with a partition compression code word, the partition compression code word representing a partition command sequence, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

adding bytes to a string including the command sequence representing the first end of the segment until the string does not have a match in the dictionary;

adding a code word to the dictionary, the code word including the partition command sequence as a root, the code word representing the string if the string is obtained in a first iteration;

utilizing the code word in the dictionary to represent the string if the string is not obtained in the first iteration;

compressing a remainder of the segment, if any.

9.   (Cancelled)

10.   (Cancelled)

11.   (Cancelled)

12.   (Cancelled)

13.   (Cancelled)

14.   (Currently Amended) ~~The~~ A system ~~of claim 13~~ for compressing data for transmission using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, the system comprising:

        means for representing the first end of a segment of the plurality of segments with a partition compression code word, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet; and

        means for compressing a remaining portion of the segment,

        wherein the partition compression code word represents a partition command sequence, and

        wherein the representing means further includes means for:

providing a compound compression code word to represent the partition command sequence and another portion of the segment, the partition command sequence representing the first end of the segment.

15.   (Cancelled)

16.   (Cancelled)

17.   (Previously Presented)   A system for compressing data for transmission using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, a dictionary being used in compressing the data, the system comprising:

means for representing the first end of a segment of the plurality of segments with a partition compression code word representing a partition command sequence, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

means for adding bytes to a string including the first end of the segment until the string does not have a match in the dictionary;

means for adding a code word to the dictionary, the code word including the partition command sequence as a root, the code word representing the string if the string is obtained in a first iteration;

means for utilizing the code word in the dictionary to represent the string if the string is not obtained in the first iteration;

means for compressing a remainder of the segment, if any.

18.   (Cancelled)

19.   (Cancelled)

20.   (Previously Presented)   A computer-readable medium containing a program for compressing data for transmission using asynchronous transform mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, a dictionary being used in compressing the data, the program including instructions for:

representing the first end of a segment of the plurality of segments with a partition compression code word, the partition compression code word representing a partition command sequence, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

adding bytes to a string including the first end of the segment until the string does not have a match in the dictionary;

adding a code word to the dictionary, the code word including the partition command sequence as a root, the code word representing the string if the string is obtained in a first iteration;

utilizing the code word in the dictionary to represent the string if the string is not obtained in the first iteration;

compressing a remainder of the segment, if any.

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21.   (Cancelled)

22.   (Cancelled)